

My friend Mr. Bowerbank examined this Mould with the microscope. When highly magnified, many of the main filaments exhibited slight protuberances, which were supposed to be incipient branches; these were sometimes opposed to each other, and sometimes they were not quite in opposition. The sporules varied considerably in size, and were ovate or elliptical. Placed in water between glasses, after a lapse of two days it was found that most of the sporules had germinated, each emitting a single filament, which was sparingly and irregularly branched, and contained some very minute granules.—*From the Transactions of the Berwickshire Naturalists' Club, vol. ii. p. 213.*

#### METEOROLOGICAL OBSERVATIONS FOR APRIL 1848.

*Chiswick.*—April 1. Foggy: very fine: clear. 2. Foggy in the morning: very fine. 3, 4. Slight fog: fine. 5. Fine. 6. Overcast: very fine. 7. Cloudy: rain at night. 8, 9. Rain. 10. Fine: rain at night. 11. Cloudy: rain. 12. Showery. 13. Overcast: heavy rain at night. 14. Clear and cold. 15. Foggy: rain. 16. Hazy and damp: cloudy: rain. 17. Showery. 18. Rain. 19. Cloudy: fine. 20. Fine: rain. 21. Drizzly: overcast: rain at night. 22. Rain: drizzly: partially overcast. 23. Fine: cloudy: slight rain. 24. Overcast: drizzly. 25. Densely clouded. 26. Fine. 27. Clear: shower: clear. 28. Cold rain: overcast: clear. 29. Overcast: fine. 30. Fine throughout.

Mean temperature of the month .....	47°·33
Mean temperature of April 1847 .....	44 ·28
Mean temperature of April for the last twenty years .....	47 ·06
Average amount of rain in April .....	1·47 inch.

*Boston.*—April 1. Foggy. 2. Fine: thunder and lightning P.M. 3, 4. Fine. 5. Cloudy: rain P.M. 6. Fine: rain early A.M. 7. Fine. 8. Rain: rain A.M. and P.M. 9. Cloudy: rain A.M. 10. Cloudy: rain P.M. 11. Fine. 12. Cloudy: rain A.M. and P.M. 13. Rain: rain A.M. 14. Fine. 15. Cloudy. 16. Cloudy: rain P.M. 17. Cloudy: rain early A.M. 18. Cloudy: rain P.M. 19, 20. Fine: rain P.M. 21. Cloudy. 22. Cloudy: rain early A.M. 23. Cloudy: brisk wind: rain P.M. 24. Rain: rain A.M. 25. Rain: rain early A.M.: rain P.M. 26. Cloudy: hail and rain A.M. 27. Fine. 28. Cloudy. 29, 30. Fine.

*Applegarth Manse, Dumfries-shire.*—April 1. Fine spring day. 2. Fine spring day: one slight shower. 3. Fine spring day: rain P.M. 4. Fair, but cloudy. 5. Fair A.M.: rain P.M. 6. Fair A.M.: rain: hail. 7. Rain: frost A.M. 8. Showers: snow preceding night. 9. Fair: cloudy P.M. 10, 11. Frost A.M. 12. Cloudy: cleared. 13. Frost A.M. \* 14. Frost: one shower. 15. Frost: very cold. 16. Cloudy and threatening. 17. Rain early A.M. 18. Slight rain early. 19. Fair and fine: thunder. 20. Fine: showers. 21. Rain early A.M. 22. Slight shower: rain P.M. 23. Fair and droughty. 24. Fair: rain P.M. 25. Showery. 26. Slight hail. 27. Frost, keen: rain P.M. 28. Hail: frequent showers. 29. Hail: frost. 30. Hard frost.

Mean temperature of the month .....	43°·2
Mean temperature of April 1847 .....	43 ·4
Mean temperature of April for twenty-five years .....	44 ·2
Mean rain in April for twenty years .....	1·76 inch.

*Sandwick Manse, Orkney.*—April 1. Bright: cloudy. 2. Bright: drops. 3. Damp: drops. 4. Bright: showers. 5. Showers: aurora. 6. Sleet-showers: showers: sleet. 7. Clear: frost: aurora. 8. Clear: frost: snow-showers. 9. Snow-showers: clear: frost. 10—13. Clear. 14. Cloudy. 15. Bright: cloudy. 16. Bright: cloudy: drops. 17, 18. Damp. 19. Cloudy. 20. Damp. 21. Cloudy. 22. Clear: cloudy. 23, 24. Damp. 25. Cloudy: drops. 26. Snow-showers: clear. 27. Bright: cloudy. 28. Hail-showers. 29. Sleet-showers: hail-showers: aurora. 30. Bright: hail-showers: aurora.